



**SPS KLIMA**  
Strategic Products and Services

# INSTALLATION MANUAL

## *Low Static Pressure Duct type*

Digital Scroll and DC/AC Inverter Commercial Air-conditioner

*The Digital Scroll and DC/AC Inverter share the same indoor units.*

Thank you very much for purchasing our air conditioner,  
please read this manual carefully and keep it for future reference.

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## 1. PRECAUTIONS

- Be sure to be in conformity with the local, national and international laws and regulations.
- Read "PRECAUTIONS" carefully before installation.
- The following precautions include important safety items. Observe them and never forget.
- Keep this manual with the owner's manual in a handy place for future reference.

The safety precautions listed here are divided into two categories. In either case, important safety information is listed which must be read carefully.



### WARNING

Failure to observe a warning may result in death.



### CAUTION

Failure to observe a caution may result in injury or damage to the equipment.

After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained. Also, inform customers that they should store this installation manual along with the owner's manual for future reference.



### WARNING

Be sure only trained and qualified service personnel to install, repair or service the equipment.

Improper installation, repair, and maintenance may result in electric shocks, short-circuit, leaks, fire or other damage to the equipment.

Install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electric shocks, fire.

When installing the unit in a small room, take measures against to keep refrigerant concentration from exceeding allowable safety limits in the event of refrigerant leakage. Contact the place of purchase for more information. Excessive refrigerant in a closed ambient can lead to oxygen deficiency.

Use the attached accessories parts and specified parts for installation.

otherwise, it will cause the set to fall, water leakage, electrical shock fire.

Install at a strong and firm location which is able to withstand the set's weight.

If the strength is not enough or installation is not properly done, the set will drop to cause injury.

The appliance shall not be installed in the laundry.

Before obtaining access to terminals, all supply circuits must be disconnected.

The appliance must be positioned so that the plug is accessible.

The enclosure of the appliance shall be marked by word, or by symbols, with the direction of the fluid flow.

For electrical work, follow the local national wiring standard, regulation and this installation instructions. An independent circuit and single outlet must be used.

If electrical circuit capacity is not enough or defect in electrical work, it will cause electrical shock fire.

Use the specified cable and connect tightly and clamp the cable so that no external force will be acted on the terminal.

If connection or fixing is not perfect, it will cause heat-up or fire at the connection.

Wiring routing must be properly arranged so that control board cover is fixed properly.

If control board cover is not fixed perfectly, it will cause heat-up at connection point of terminal, fire or electrical shock.

If the supply cord is damaged, it must be replaced by the manufacture or its service agent or similarly qualified person in order to avoid a hazard.

An all-pole disconnection switch having a circuit separation of at least 3mm in a poles should be connected in fixed wiring.

When carrying out piping connection, take care not to let air substances go into refrigeration cycle.

Otherwise, it will cause lower capacity, abnormal high pressure in the refrigeration cycle, explosion and injury.

Do not modify the length of the power supply cord or use of extension cord, and do not share the single outlet with other electrical appliances.

Otherwise, it will cause fire or electrical shock.

Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.

Improper installation work may result in the equipment falling and causing accidents.

**If the refrigerant leaks during installation, ventilate the area immediately.**

Toxic gas may be produced if the refrigerant comes into the place contacting with fire.

**The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tub.**

**After completing the installation work, check that the refrigerant does not leak.**

Toxic gas may be produced if the refrigerant leaks into the room and comes into contact with a source of fire, such as a fan heater, stove or cooker.



## CAUTION

### **Ground the air conditioner.**

Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire. Incomplete grounding may result in electric shocks.

### **Be sure to install an earth leakage breaker.**

Failure to install an earth leakage breaker may result in electric shocks.

### **Connect the outdoor unit wires, then connect the indoor unit wires.**

You are not allowed to connect the air conditioner with the power source until wiring and piping the air conditioner is done.

### **While following the instructions in this installation manual, install drain piping in order to ensure proper drainage and insulate piping in order to prevent condensation.**

Improper drain piping may result in water leakage and property damage.

### **Install the indoor and outdoor units, power supply wiring and connecting wires at least 1 meter away from televisions or radios in order to prevent image interference or noise.**

Depending on the radio waves, a distance of 1 meter may not be sufficient enough to eliminate the noise.

### **The appliance is not intended for use by young children or infirm persons without supervision.**

**Young children should be supervised to ensure that they do not play with the appliance.**

### **Don't install the air conditioner in the following locations:**

- There is petrolatum existing.
- There is salty air surrounding (near the coast).
- There is caustic gas (the sulfide, for example) existing in the air (near a hot spring).
- The Volt vibrates violently (in the factories).
- In buses or cabinets.
- In kitchen where it is full of oil gas.

- There is strong electromagnetic wave existing.
  - There are inflammable materials or gas.
  - There is acid or alkaline liquid evaporating.
  - The appliance shall not be installed in the laundry.
  - Other special conditions.
- 

## 2. INSTALLATION INFORMATION

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- To install properly, please read this "installation manual" at first.
  - The air conditioner must be installed by qualified persons.
  - When installing the indoor unit or its tubing, please follow this manual as strictly as possible.
  - If the air conditioner is installed on a metal part of the building, it must be electrically insulated according to the relevant standards to electrical appliances.
  - When all the installation work is finished, please turn on the power only after a thorough check.
  - Regret for no further announcement if there is any change of this manual caused by product improvement.
- 

## INSTALLATION ORDER








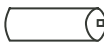



- Select the location;
- Install the indoor unit;
- Install the outdoor unit;
- Install the connecting pipe ;
- Connect the drain pipe;
- Electric wiring;
- Test operation.

### 3. ATTACHED FITTINGS AND PARTS BUY IN LOCAL

#### 3.1 Attached fittings

Please check whether the following fittings are of full scope. If there are some spare fittings , please restore them carefully.

Table 3-1

NAME	QUANTITY	SHAPE	USAGE
Installation manual	1	This manual	_____
Insulation pipe	2		Pipe joint heat insulation
Washer	8		Overhang indoor units
Remote controller	1		Remote control air conditioner
Frame	1		_____
Constriction bandage	10		_____
Network matching wire	1		The indoor unit which at the terminal of communication system should connect a impedance between port P and port q.
Remote controller manual	1		_____
Controlling discreteness installation plot	1	_____	_____
7# Alkaline battery	2		For remote controller
Installation spring	2		Fix water outlet
Water outlet joint	1		For drainage
Signal receiver display board	1		Receive signal

#### 3.2 Parts buy in local

Table 3-2

Unit: mm

	MODEL	18~45	56	REMARK
Brass pipe	Liquid side pipe	Φ6.4×0.8	Φ9.5×0.8	For connecting refrigerant pipe, better use flexible brass pipe(T2M), whose length depend on actual construction.
	Gas side pipe	Φ12.7×0.8	Φ15.9×0.8	
PVC drain pipe	Drain pipe of indoor unit, the length depend on the actual needs.			
Insulation pipe	The diameter must match the corredpongding brass pipe and rigid Polyethylene plastic pipe, thickness is usually at 10mm(above), suitable thicken in closed humid regions.			

## 4. INDOOR UNIT INSTALLATION

### 4.1 Installation place

(refer to fig.4-1 for specification.)

The indoor unit should be installed in a location that meets the following requirements:

- There is enough room for installation and maintenance.
- The ceiling is horizontal, and its structure can endure the weight of the indoor unit.
- The outlet and the inlet are not impeded, and the influence of external air is the least.
- The air flow can reach throughout the room.
- The connecting pipe and drainpipe could be extracted out easily.
- There is no direct radiation from heaters.

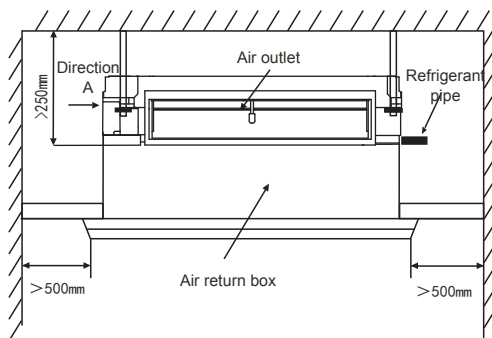


fig.4-1

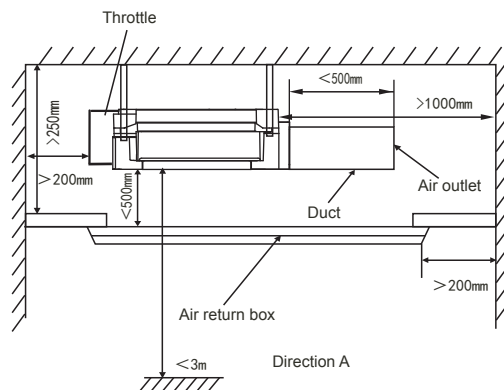


fig.4-2



### CAUTION

The air inlet and outlet mode of the new type is sending from the side and returning from the back, using hanging returning.

New type's air inlet has provided the examine and repair place, which can design integrated with the air inlet. It's simple size is longer than the machine and wider than the sum of the machine and the throttle's width. And when it needs examination, mobile air inlet is easier to take down.

Connect about 500mm length pipe to the air outlet, the air inlet must be sealed, or it will make the air flow short.

The back of the machine must be 200mm away from the wall to make sure air inlet freely.

### 4.2 Install the main body



### WARNING

Install the air conditioner in a intensive place to support the weight of the machine.

If there is not intensive enough, the machine may fall down and result in injury.

Install specifically to prevent strong wind or earthquake.

Halfway installation may result in accident because of the machine's falling.

#### 1 Installing $\Phi 10$ hanging screw bolts. (4 bolts)

- Please install with  $\Phi 10$  hanging screw bolts.
- The handling to the ceiling varies from the constructions, consult the construction person for the specific condition.
  - The size of the ceiling to be handled----- Do keep the ceiling flat. Consolidate the roof beam for possible vibration.
  - Cut off the roof beam.
  - Strengthen the place that has been cut off, and consolidate the roof beam.
  - After the selection of installation location, position the refrigerant pipes, drain pipes, indoor & outdoor wires to the connection places before hanging up the machine.
- Overhanging the indoor unit.
  - Overhang the indoor unit onto the hanging screw bolts with block.
  - Position the indoor unit in a flat level by using the level indicator.

#### 2 The installation of hanging screw bolts.

##### WOODEN CONSTRUCTION

Put the square timber transversely over the roof beam, then install the hanging screw bolts.

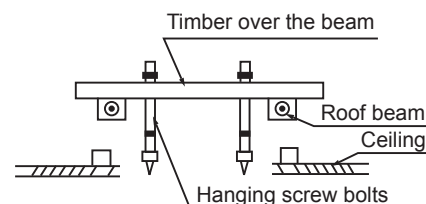


Fig.4-3

## NEW CONCRETE BRICKS

Inlaying or embedding the screw bolts.

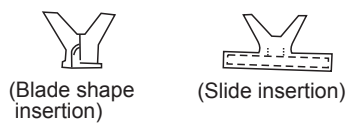


Fig.4-4

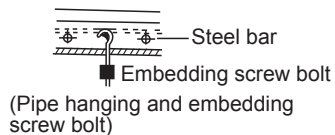


Fig.4-5

## FOR ORIGINAL CONCRETE BRICKS

Install the hanging hook with expansible bolt into the concrete deep to 45~50mm to prevent loose.

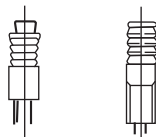


Fig.4-6

## STEEL ROOF BEAM STRUCTURE

Install and use directly the supporting angle steel.

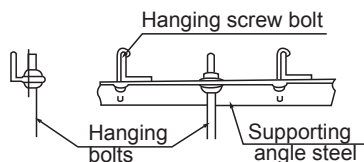


Fig.4-7



## CAUTION

The material of bolt is steel carbide of high quantity (galvanization on the surface or other anticorrosive disposal) or stainless steel.

The handling to the ceiling varies from the constructions, consult the construction person for the specific condition.

Hanging screw bolt's fixation depend on the specific condition, which must be firmness.

## 4.3 Installation size of the hanging screw

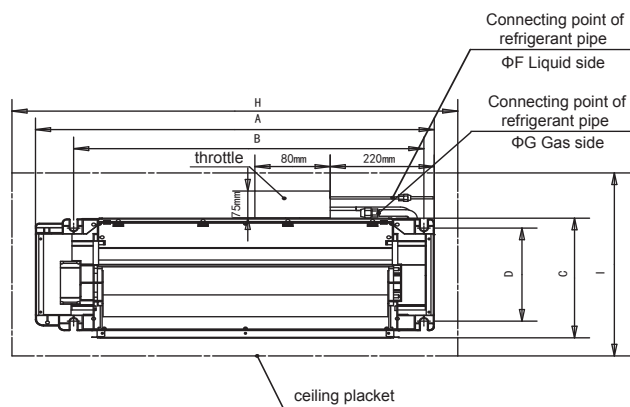
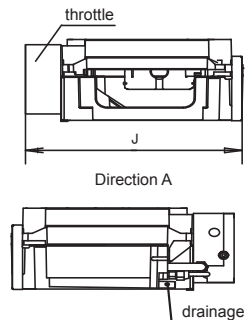
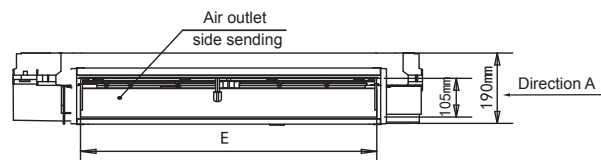


Fig.4-8

Table 4-1

Unit:mm

MODEL	A	B	C	D	E
18	850	744	330	260	630
22	850	744	330	260	630
28	850	744	330	260	630
36	850	744	330	260	630
45	1030	894	355	285	780
56	1030	894	355	285	780

MODEL	F	G	H	I	J
18	6.4	12.7	950	505	405
22	6.4	12.7	950	505	405
28	6.4	12.7	950	505	405
36	6.4	12.7	950	505	405
45	9.5	15.9	1150	530	430
56	9.5	15.9	1150	530	430

## 4.4 Overhanging the indoor unit

- Adjust the position of the nut, the clearance between washer (underside) and ceiling depend on actual construction condition.

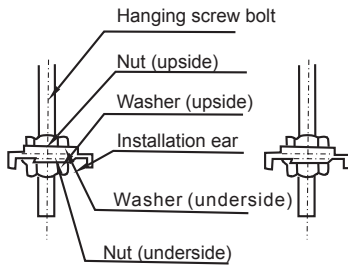


Fig.4-9

- Install the hanging screw bolt to the U-shaped slot of installation ear.
- Measure the level degree of unit with a gradienter. (Better inclined to the drain side. )

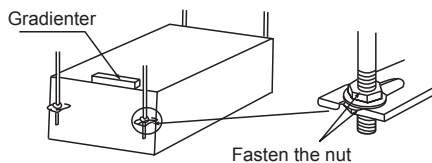


Fig.4-10

## 4.5 Air inlet panel of air return box

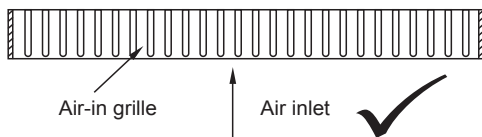


Fig.4-11-a

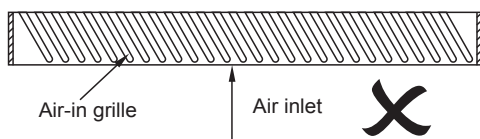


Fig.4-11-b



### CAUTION

Make the air inlet grille and air inlet direction in parallel.

There is no angle between the air inlet grille and air inlet direction, unless may cause loud noise. Such as Fig.6-13-b is incorrect.

## 5. CONNECT THE DRAIN PIPE

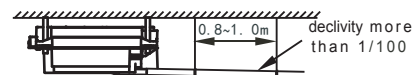
### 5.1 Install indoor unit drain pipe

- The outlet has PTI screw bread, Please use sealing materials and pipe sheath(fitting) when connecting PVC.
- The drain pipe of indoor unit must be heat insulated, or it will condense dew, as well as the connections of the indoor unit.
- Hard PVC binder must be used for pipe connection, and make sure there is no leakage.
- With the connection part to the indoor unit, please be noted not to impose pressure on the side of indoor unit pipes.
- When the declivity of the drain pipe downwards is over 1/100, there should not be any winding.
- The total length of the drain pipe when pulled out transversely shall not exceed 20m, when the pipe is over long, a prop stand must be installed to prevent winding.
- Refer to the figures on the right for the installation of the pipes.
- The distance between the end of the drain pipe and the floor or the bottom of the waterspout must be more than 50mm, and do not put it in the water. when the condense dew directly discharge to the slot, the drain pipe must be bend to make a U-shaped block to interdict the stench.

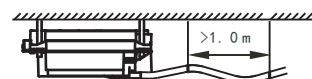


### CAUTION

Make sure all the connecting point of the drainage system is sealed to prevent leakage.



a ○



b ✗

Fig.5-1

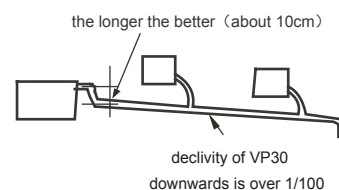


Fig.5-2

## 5.2 Drainage test

- Check whether the drainpipe is unhindered.
- New built house should have drain test done before paving the ceiling.
  - Stow water of about 500ml to the water receiver through the stow tube.
  - Turn on the power, set the air conditioner under the mode of "COOLING". Check whether the drainpipe is unhindered(According to the length of the drainpipe, it drained after one minute.), and whether there's a leakage exist in all the connecting point.

## 6. INSTALL THE CONNECTING PIPE AND THE THROTTLE

### 6.1 The requirement of the connecting pipe's length and height

- The length of the pipe refers to the outdoor unit manual.
- The fall of the pipe refers to the outdoor unit manual.



#### CAUTION

Do not let air, dust, or other impurities fall in the pipe system during the time of installation.

The connecting pipe should not be installed until the indoor and outdoor units have been fixed already.

Keep the connecting pipe dry, and do not let moisture in during installation.

Execute heat insulation work completely on both sides of the gas piping and the liquid piping. Otherwise, this can sometimes result in water leakage.

The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.

### 6.2 The material and size of the pipe

Table 6-1

MODEL	18~45	56	REMARK
Liquid side pipe	Φ6.4×0.8	Φ9.5×0.8	For connecting refrigerant pipe, better use flexible brass pipe(T2M), whose length depend on actual construction.
Gas side pipe	Φ12.7×0.8	Φ15.9×0.8	

## 6.3 The Procedure of Connecting Pipes

### 1 Measure the necessary length of the connecting pipe, and make it by the following way.

- Connect the indoor unit at first, then the outdoor unit.
  - Bend the tubing in proper way. Do not harm to them.
  - Daub the surfaces of the flare pipe and the joint nuts with frozen oil, and wrench it for 3~4 rounds with hands before fasten the flare nuts.(Refer to chart 16)

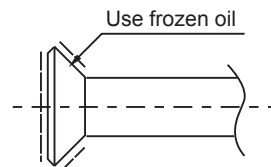


Fig.6-1

- Be sure to use two wrenches simultaneously when you connect or disconnect the pipes.
- Make sure that the weight of pipe does not endured by the connecting point of indoor unit, the pipe will be metamorphosed because of the overweight, and will influence the effect of refrigeration(heat).

- The stop valve of the outdoor unit should be closed absolutely (as original state).Every time you connect it,first loosen the nuts at the part of stop valve, then connect the flare pipe immediately (in 5 minutes). If the nuts have been loosened for a long time, dusts and other impurities may enter the pipe system and may cause malfunction later. So please expel the air out of the pipe with refrigerant before connection.

- Expel the air(refer to the "Expel The Air")after connecting the refrigerant pipe with the indoor unit and the outdoor unit. Then fasten the nuts at the repair-points.

- Notice for bendable pipe.
  - The bending angle should not exceed 90° .
  - Bending position is preferably in the middle of the bendable pipe. The bending radius must be larger than 3.5D(the diameter of the pipe).
  - Do not bend the pipe more than three times.

Bend the pipe with thumb



min-radius 100mm

Fig.6-2

- Bend the connecting pipe of small wall thickness.
  - Cut out a desired concave at the bending part of the insulating pipe. Then expose the pipe(cover it with tapes after bending).
  - To prevent collapsing of deforming, please bend the pipe at its biggest radius.
  - Use bender to get a small radius pipes.

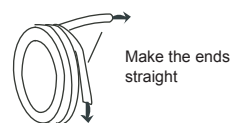


Fig.6-3

- Use the market brass pipe.

Be sure to use the same insulating materials when you buy the brass pipe. (More than 10mm thick)



## 2 Locate The Pipe

- Drill a hole in the wall (suitable just for the size of the wall conduit), then set on the fittings such as the wall conduit and its cover. Bind the connecting pipe and the cables together tightly with binding tapes.
- Pass the bound connecting pipe through the wall conduit from outside. Be careful of the pipe allocation to do on damage to the tubing.

## 6.4 Refrigerant Pipe Connection

### 1 Flaring

- Cut a pipe with a pipe cutter. (refer to Fig.6-4)

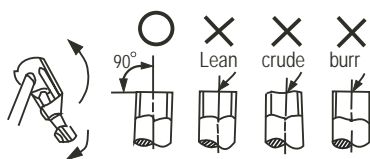


Fig.6-4

- Insert a flare nut into a pipe and flare the pipe.

### 2 Fasten the nut

- Put the connecting tubing at the proper position, wrench the nuts with hands then fasten it with a wrench. (Refer to Fig.6-5)

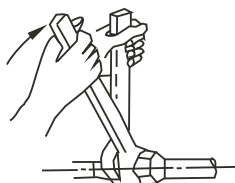


Fig.6-5



### CAUTION

Too large torque will harm the bellmouthing and too small will cause leakage. Please determine the torque according to Table 6-2.

Table 6-2

Pipe gauge	Tightening torque	Flare dimension A max (mm)min		Flare shape
Ø6.4	14.2~17.2 N.m	8.7	8.3	
Ø9.5	32.7~39.9 N.m	12.4	12.0	
Ø12.7	49.5~60.3 N.m	15.8	15.4	
Ø15.9	61.8~75.4 N.m	19.0	18.6	
Ø19.1	97.2~118.6 N.m	23.3	22.9	

## 6.5 Install The Throttle

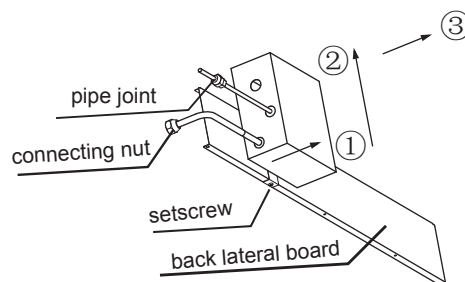
- Installation diagram of the throttle

The throttle has been installed on the unit when the unit leaves factory. Please connect the connecting nut of the throttle to the pipe joint of the evaporator's input pipe, and fasten it with a wrench.

- Maintenance diagram of the throttle

The throttle has been installed on the unit when the unit leaves factory, which connect by a bolt and a fastener. Please maintain the throttle by the following way.

- Take all the refrigerant back to the outdoor unit.
- Open the maintenance place.
- Open the connecting nut of the throttle, connecting pipe and the unit.
- Take away the setscrew of the throttle and the back lateral board by a crossed screwdriver.
- Take out the the throttle according to Fig. 6-6.
- Examine and maintain the throttle.



the diagram of wiping off the connecting pipe

Fig.6-6

## 6.6 Gastightness Experimentation

After install the refrigerant pipe, connect which to the outdoor unit, inject the nitrogen of definite pressure form the gas side and the liquid side at the same time (R22 type: 28kgf/cm<sup>2</sup>(2.8MPa) R410A type: 40kgf/cm<sup>2</sup>(4.0MPa)), and do the gastightness experimentation for 24 hours.

## 6.7 Air Purge

Connect the refrigerant pipe to the gas side and liquid side of the outdoor unit, and vaccumize from both gas side and liquid side at the same time by vaccum pump.



### CAUTION

Never use the refrigerant sealed in the outdoor unit to vaccumize.

## 6.8 Valve Switch

Use a 5mm hexagon to open and close the outdoor unit's valve.

## 6.9 Leak Detection

Use soap bubble to detect whether the valve of the pipe's connecting part has leakage or not.

## 6.10 Insulation Treatment

Insulate the gas side and liquid side pipe, when refrigerating, the temperature of the gas side and liquid side pipe is very low, please insulate adequately to avoid winding.

- Make sure use the insulation materials with above 120° heat-resistant on the gas side pipe.
- Please use the accessory insulation materials to insulate without gaps at the pipe connecting part of the indoor unit.

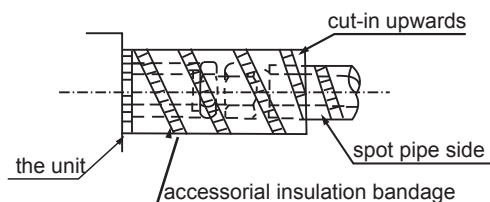


Fig.6-7

# 7. ELECTRIC CONNECTION

## 7.1 Electric Wiring



### CAUTION

The air conditioner should use separate power supply with rated voltage.

The external power supply to the air conditioner should have ground wiring, which is linked to the ground wiring of the indoor and outdoor unit.

The wiring work should be done by qualified persons according to circuit drawing.

an all-pole disconnection device which has at least 3mm separation distance in all pole and a residual current device(RCD)with the rating of above 10mA shall be incorporated in the fixed wiring according to the national rule

According to the national rule, set up the current leakage protection device.

Be sure to locate the power wiring and the signal wiring well to avoid cross-disturbance.

Do not turn on the power until you have checked carefully after wiring.

## 7.2 Power Specifications

Too small capacitance lead to wiring overheating, and will cause a burning machine accident. Power specifications refers to Table 7-1.

Table 7-1

MODEL		18~56
Power	Phase	1-Phase
	Volt and frequency	220-240V~ 50/60Hz
	Manual switch	15A
	Insurance	15A
Power wire	Less than 20m	2×2.5mm <sup>2</sup>
	Less than 50m	2×4mm <sup>2</sup>
	Ground wiring	Single wire 2.5mm <sup>2</sup>
Outdoor signal wire	Amount	1
	Diameter	3-core shielded wire 0.75mm <sup>2</sup>

## 7.3 Wiring of Indoor Unit Power Supply and Signal Wire

- The indoor unit should use dedicated power supply different from the outdoor unit.
- The power supply, current leakage protection device and the switch of the indoor unit which connect to the same outdoor unit should be universal.
- The indoor unit power supply wire connect to port L and port N, port ⊕ connect to the ground wire, the indoor unit signal wire connect to port P, port Q and port E which correspond to port P, port Q and port E of the outdoor unit.

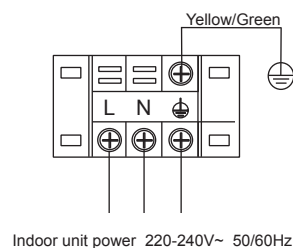


Fig.7-1

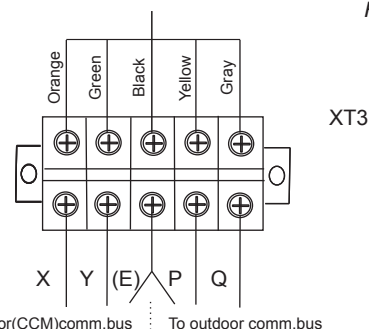


Fig.7-2

## 7.4 Wiring connection diagram

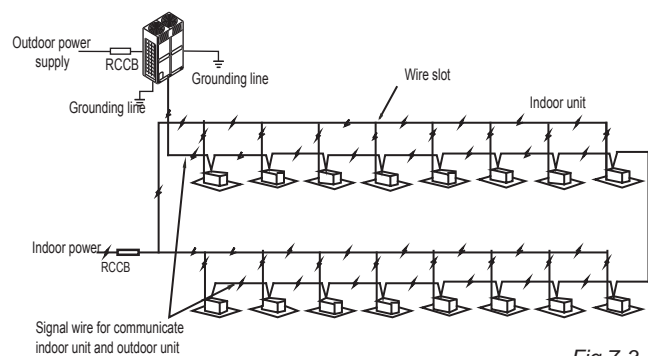


Fig.7-3

## 7.5 Signal wire of indoor/outdoor unit

- The control line should be shielded wire. Using other wiring shall create signal interference, thus leading to error operation.
- Single end to shield net of shielded wire should be grounded.  
Note: The shield net should be grounded at the wiring terminal of outdoor unit. The inlet and outlet wire net of indoor communication wire should be connected directly and could not be grounded, and form open circuit at the shield net of final indoor unit.
- Control wire could not be bound together with refrigerant pipeline and power wire. When power wire and control wire is distributed in parallel form, keep gap between them above 300mm so as to preventing signal interference.
- Control wire could not form closed loop.
- Control wire has polarity, so be careful when connecting.
- Please use 3-core shield wire (more than or equal to 0.75 mm<sup>2</sup>) for signal wire of indoor/outdoor units, which has polarity, need to connect correctly.

## 7.6 Wiring connection

- Seal the wiring connection with the insulation material, or the condensing dew will be caused.

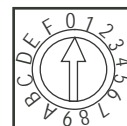
## 7.7 Terminal board diagram

- Please refer to the indoor unit wiring diagram for the wiring.

# 8. CONTROL

## 8.1 Capacity set and system address set

Set the PCB board toggle of the indoor unit electric control box by the different use. After setting, make sure to switch off the power, and then switch on it. If you don't switch on the power, the capacity you set can not implement.



POWER\_S

Fig.8-1

### FUNCTION DESCRIPTION:

- POWER\_S: Cooling capacity set, use for setting the cooling capacity of the machine.

Table.8-1

POWER_S	Toggle switch	For set horsepower
	Code	Capacity(Horsepower)
Note: The horsepower has been set before leaving the factory, anyone can't modify it except the maintenance person.	0	1800W(0.6HP) 2200W(0.8HP)
	1	2800W(1.0HP)
	2	3600W(1.3HP)
	3	4500W(1.6HP)
	4	5600W(2.0HP)
	5	7100W(2.5HP)
	6	8000W(3.0HP)
	7	9000W(3.2HP)
	8	11200W(4.0HP)
	9	14000W(5.0HP)



### CAUTION







- The system together have 64 units(0-63), everyone has only system address code, If two addresses are the same in one system, the abnormal operation will occur.
- If the outdoor unit connected to is not the type of D3、D4、V3、V4, the last 32 address toggle invalid.

## 8.2 Network address set









- 1) Network address is set by communication of indoor and outdoor unit; the address is the same as indoor address, there is no need to set separately.
- 2) The central control of indoor units can be done on outdoor unit, there is no need to control indoor unit separately, for details please refer to V4+ outdoor unit manual.
- 3) For previous control of indoor units, the network can be set by connecting (X,Y,E) terminals, there is no need to set network address. The network can also be set by outer network module and main board (CN20).

## 8.3 Main board Code designation





### SW1 definition

ON 	<ul style="list-style-type: none"> <li>● 1 means factory test mode</li> <li>● 0 means add. auto searching mode (default setting)</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 01 means DC fan static pressure is 1 (reserved)</li> </ul>
ON 	<ul style="list-style-type: none"> <li>● 1 means DC fan Is chosen</li> <li>● 0 means AC fan Is chosen</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 10 means DC fan static pressure is 2 (reserved)</li> </ul>
ON 	<ul style="list-style-type: none"> <li>● 00 means DC fan static pressure is 0 (reserved)</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 11 means DC fan static pressure is 3 (reserved)</li> </ul>




### SW2 definition

ON 	<ul style="list-style-type: none"> <li>● 00 means the temperature is 15 degrees when shutting down the unit for cold wind proof.</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 00 means the time of stopping THERMAL fan is 4 minutes</li> </ul>
ON 	<ul style="list-style-type: none"> <li>● 01 means the temperature is 20 degrees when shutting down the unit for cold wind proof.</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 01 means the time of stopping THERMAL fan is 8 minutes</li> </ul>
ON 	<ul style="list-style-type: none"> <li>● 10 means the temperature is 24 degrees when shutting down the unit for cold wind proof.</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 10 means the time of stopping THERMAL fan is 12 minutes</li> </ul>
ON 	<ul style="list-style-type: none"> <li>● 11 means the temperature is 26 degrees when shutting down the unit for cold wind proof.</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 11 means the time of stopping THERMAL fan is 16 minutes</li> </ul>




### SW5 definition

ON 	<ul style="list-style-type: none"> <li>● 00 means temperature compensation is 6 degrees under heating mode</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 10 means temperature compensation is 4 degrees under heating mode</li> </ul>
ON 	<ul style="list-style-type: none"> <li>● 01 means temperature compensation is 2 degrees under heating mode</li> </ul>	ON 	<ul style="list-style-type: none"> <li>● 11 means temperature compensation is 8 degrees under heating mode</li> </ul>

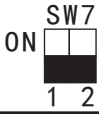
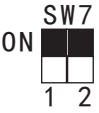
### SW6 definition

ON 	<ul style="list-style-type: none"> <li>● 1 means old display panel</li> <li>● 0 means new display panel</li> </ul>
ON 	<ul style="list-style-type: none"> <li>● 1 means auto wind under auto mode</li> <li>● 0 means auto wind under non auto mode</li> </ul>
ON 	reserved



### J1, J2 definition

J1 	J1 no Jumpers means power off memory function
J1 	J1 Jumpers means no power off memory function
J2 	reserved

## SW7 definition

	Standard configure
	Last one in the network

## 0/1 definition

	Means 0
	Means 1

## 9. TEST OPERATION



### CAUTION

Protection function will delay the startup of compressor for 3 minutes in case the unit is turned on immediately after power on or restarted after shutdown.

- According to the user's requirement, install the remote controller frame where the remote controller's signal can reach the indoor unit smoothly.
- Test operation
  - Set the air conditioner under the mode of "COOLING" with the remote controller, and check the following points per the "Owner's Manual". If there is any malfunction, please resolve it through chapter "Troubles And Causes".
- The indoor unit
  - Whether the switch on the remote controller works well.
  - Whether the buttons on the remote controller works well.
  - Whether the air flow louver moves normally.
  - Whether the room temperature is adjusted well.
  - Whether the indicator lights normally.
  - Whether the temporary buttons works well.
  - Whether the drainage is normal.
  - Whether there is vibration or abnormal noise during operation.
  - Whether the air conditioner heats well in the case of the HEATING/COOLING type.
- The outdoor unit
  - Whether there is vibration or abnormal noise during operation.
  - Whether the generated wind, noise, or condensed water by the air conditioner have influenced your neighborhood.
  - Whether any of the refrigerant is leaked.
- The test operation must be carried out after the entire installation has been completed.
- Please confirm the following points before the test operation:
  - The indoor unit and outdoor unit are installed properly.
  - Tubing and wiring are correctly completed.
  - The refrigerant pipe system is leakage-checked.
  - The drainage is unimpeded.
  - The heating insulation works well.
  - The ground wiring is connected correctly.
  - The length of the tubing and the added stow capacity of the refrigerant have been recorded.
  - The power voltage fits the rated voltage of the air conditioner.
  - There is no obstacle at the outlet and inlet of the outdoor and indoor and indoor units.
  - The gas-side and liquid-side stop valves are both opened.
  - The air conditioner is pre-heated by turning on the power.